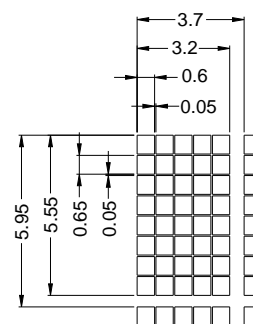
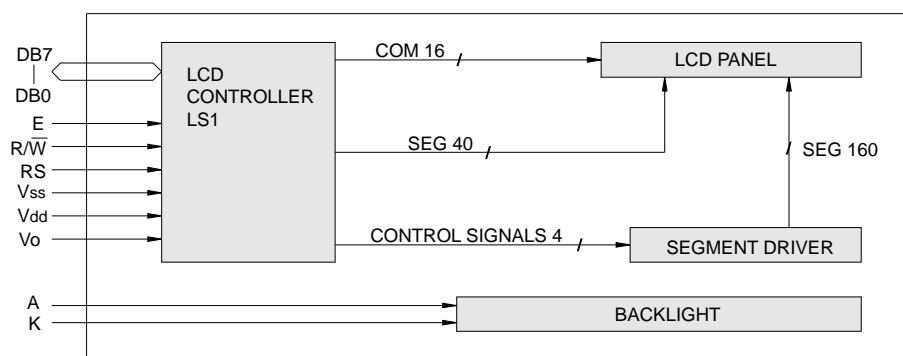
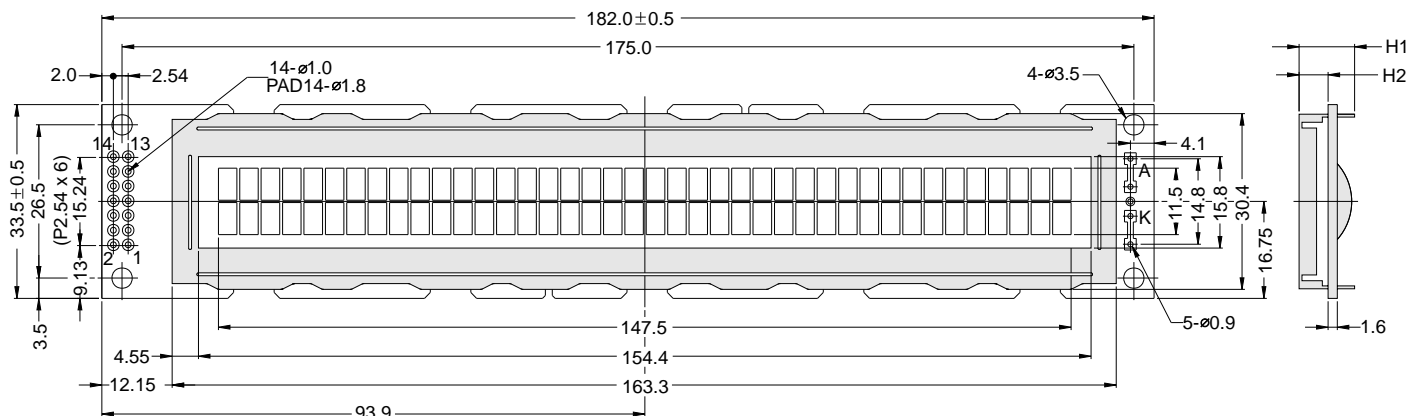




## OUTLINE DIMENSION & BLOCK DIAGRAM



The tolerance unless classified  $\pm 0.3\text{mm}$

### MECHANICAL SPECIFICATION

Overall Size	182.0 x 33.5	Module	H2 / H1
View Area	154.0 x 15.80	W / O B/L	5.0 / 9.6
Dot Size	0.60 x 0.65	EL B/L	- / -
Dot Pitch	0.65 x 0.70	LED B/L	10.5 / 15.1

### PIN ASSIGNMENT

Pin no.	Symbol	Function
1	Vss	Power supply(GND)
2	Vdd	Power supply(+)
3	Vo	Contrast Adjust
4	RS	Register select signal
5	R/W	Data read / write
6	E	Enable signal
7	DB0	Data bus line
8	DB1	Data bus line
9	DB2	Data bus line
10	DB3	Data bus line
11	DB4	Data bus line
12	DB5	Data bus line
13	DB6	Data bus line
14	DB7	Data bus line
	A	Power supply for LED B/L (+)
	K	Power supply for LED B/L (-)

### ABSOLUTE MAXIMUM RATING

Item	Symbol	Condition	Min.	Max.	Units
Supply for logic voltage	Vdd-Vss	25°C	-0.3	7	V
LCD driving supply voltage	Vdd-Vee	25°C	-0.3	13	V
Input voltage	Vin	25°C	-0.3	Vdd+0.3	V

### ELECTRICAL CHARACTERISTICS

Item	Symbol	Condition	Min.	Typical	Max.	Units
Power supply voltage	Vdd-Vss	25°C	2.7	-	5.5	V
LCD operation voltage	Vop	Top	N	W	N	W
		-20°C	-	7.1	-	7.9
		0°C	4.5	-	4.8	-
		25°C	4.1	6.1	4.4	6.4
		50°C	3.8	-	4.1	-
LCM current consumption (No B/L)	Idd	Vdd=5V	-	2.5	4	mA
			-	-	-	-
Backlight current consumption	LED/edge	VB/L=4.2V	-	-	-	mA
	LED/array	VB/L=4.2V	-	280	-	mA

## REMARK

LCD option: STN, TN, FSTN

Backlight Option: LED,EL Backlight feature, other Specs not available on catalog is under request.

